AMENDMENTS TO THE SPECIFICATION

Please replace the abstract with the following replacement paragraph:

A pumping apparatus has a peristaltic drive device for pumping a medium through a line that has a compressible portion. The pump contains a one-piece shaft with offset cam segments and lamellae. The shaft may or may not include a core shaft or a continuous core region for an increase in stability. The continuous core region has cam segments offset with respect to one another and contiguous to one another. The ratio between the height and stroke of the lamellae is about 4:1 or less.

Please replace the title with the following title:

Peristaltic Pump

Please replace paragraphs [0001] and [0002] with the following paragraphs:

Background of the Invention

Field of the Invention

[0001] This invention relates to a pumping apparatus with a peristaltic drive device for pumping a medium through a line having at least one compressible portion, containing a shaft with cams arranged so as to be offset with respect to one another and with attached lamellae, a positive feed being provided for the lamellae.

Description of the Related Art

[0002] Pumping apparatuses with a peristaltic drive device for pumping medium through a hose are used, for example, as transfusion pumps and infusion pumps. Appliances of this type are known in the prior art. In most appliances, a return of the lamellae is generated by means of the hose elasticity. In this case, therefore, the hose elasticity must be selected such that it is possible for the lamellae to be pushed back by the hose. Normally, therefore, hoses made from silicone are used. If there is no return system provided, a jamming of the hose and an obstruction of the throughflow or an unwanted backflow may occur.

Please replace paragraph [0015] with the following paragraph:

Summary of the Invention

[0015] The object on which the present invention is based, then, is to form a less complicated pumping apparatus with a peristaltic drive device, which makes available as high a throughflow rate as possible, along with a small type of construction, and in which a pinching of a hose or of a line in the region of its at least one compressible portion can be avoided.

Please replace paragraph [0027] with the following paragraph:

Brief Description of the Drawings

[0027] For a more detailed explanation of the invention, exemplary embodiments are described in more detail below with reference to the drawings in which:

Please replace paragraph [0041] with the following paragraph:

Detailed Description of the Preferred Embodiments

[0041] FIG. 1 shows a perspective view of a first embodiment of a pumping apparatus 1 according to the invention, which is illustrated cut away. The pumping apparatus has a housing 2, in which is arranged a peristaltic drive device for generating a fluid stream in a hose 4. The hose preferably consists of an elastic material or has at least one portion which consists of a compressible material. The hose is introduced with this portion into an introduction region 5, as may also be gathered from the cross-sectional view in FIG. 2. Pressure and throughflow sensors 6, 7 are arranged upstream and downstream of the region of influence of the peristaltic drive device. The throughflow direction of the medium within the hose through the latter is indicated by an arrow 8.

Please replace paragraph [0058] with the following paragraph:

[0058] FIGS. 13 to 16 show various basic diagrams of shafts viewed from one cross-sectional side. In FIG. 13, the illustrated embodiment includes an internal [[a]] continuous core region 22 (illustrated in Figures 2 and 7) ~~is provided~~, and the cam segments 13 of the shaft 10 are offset with respect to one another by the amount of an angle α of 40° in each case. A relatively large contact surface 32 for increasing the stability of the shaft is thereby provided between the

individual cam segments. Such a contact surface 32 is illustrated by broken lines in each of FIGS. 13 to 16.